Project Update: March 2015

Warming experiments globally use a variety of methods to simulate *in situ* temperature rise; the use of open top chambers (OTCs) is one. We conducted a preliminary survey of some of the grassland regions in the Avalanchi range in the Nilgiris, identified suitable locations for the OTCs, and have now set up 30 OTCs and paired control plots in 10 fences. Our OTCs are 50 cm high, pyramidal structures with a hexagonal base ~2.5 m in diameter. The OTC walls made of acrylic, retain incident infrared radiation, warming the interior by 3-4^0 C.

Baseline data for plant species richness and vegetation cover have been collected from the OTCs and control plots; the first of what we hope will grow into a valuable long-term dataset. Periodic measurements of these parameters in the warmed and control plots will help us detect any patterns of change in grassland vegetation due to temperature rise.


Pic 1: Fence with OTCs and paired control plots. Pic 2: Vegetation cover being measured in an OTC.